

ABSTRACT

A robot that includes a plurality of roller assemblies. Each roller assembly may include a transmission roller that is spun by a drive mechanism to rotate a drive ball. Rotation of the drive ball propels the robot across a surface. The transmission roller is in continuous contact with the drive ball. Continuous contact between the roller and ball eliminates roller induced wobble in the robot movement, reduces impact forces and resultant stress within the roller assembly and allows for the use of a drive ball that is more compliant than balls in the prior art.